PROJECT REFERENCE NO. SHEET NO. WBS # 44487 E1

PLANS AND DETAILS FOR PROPOSED LIGHTING /ELECTRICAL CONSTRUCTION



 \triangle NOTES

INSTALL ALL BORE PITS OUTSIDE THE CLEAR ZONE, AS DEFINED BY THE 2011 AASHTO ROADSIDE DESIGN GUIDE OR AS DIRECTED BY THE ENGINEER.

LOCATE ALL JUNCTION BOXES OUTSIDE CLEAR ZONE AND IN AN AREA /2\ UNLIKELY TO BE USED BY TRAFFIC.

LOCATE PROPOSED CONTROL SYSTEM IN AN AREA ACCESSIBLE FOR MAINTENANCE VEHICLES AND OUTSIDE OF CLEAR ZONE AS DEFINED BY THE 2011 AASHTO ROADSIDE DESIGN GUIDE.

INSTALL RIGID GALVANIZED CONDUIT (RGC) ABOVE GROUND, AND POLYVINYL CHLORIDE (PVC) SCHEDULE 40 CONDUIT UNDERGROUND, EXCEPT AS MODIFIED ON THESE PLAN SHEETS OR IN APPLICABLE SECTIONS OF THE ROADWAY STANDARD DRAWINGS FOR THIS PROJECT.

TYPE PC18 JUNCTION BOXES ARE 18" L X 12" W X 18" H.

SCOPE OF WORK

PLACE UNDERPASS LIGHTING SYSTEM INTO SERVICE BY PROVIDING AND INSTALLING UNDERPASS LIGHTING WITH WALL MOUNTED LIGHT EMITTING DIODE LUMINAIRES, SURFACE MOUNTED CONDUIT SYSTEM, UNDERGROUND CIRCUITRY, CONTROL SYSTEM AND JUNCTION BOXES.

DESIGN CRITERIA

1.0 AVERAGE FOOTCANDLE ON TRAVEL LANES

4:1 AVERAGE TO MINIMUM UNIFORMITY RATIO ON TRAVEL LANES

2005 AASHTO ROADWAY LIGHTING DESIGN GUIDE

2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 5TH EDITION AND LATEST INTERIM SPECIFICATIONS VALID AT THE TIME OF LETTING

2014 NATIONAL ELECTRICAL CODE

2011 AASHTO ROADSIDE DESIGN GUIDE

ROADWAY STANDARDS

THE FOLLOWING ROADWAY ENGLISH STANDARDS AS APPEAR IN "NCDOT ROADWAY STANDARD DRAWINGS", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

SID NO.	IIILE
_	
1407.01	ELECTRIC SERVICE POLE AND LATERAL
1408.01	LIGHT CONTROL SYSTEM
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUITS
1411.01	ELECTRICAL JUNCTION BOXES
1412.01	UNDERPASS LIGHTING

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2012.

LEGEND



SEAL 022582



PROPOSED UNDERPASS LUMINAIRE, TYPE WM, 50W MAX., 2400 DELIVERED LUMENS MINIMUM LED



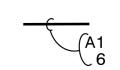
PROPOSED CONTROL SYSTEM BREAKER SIZE SHOWN IN LOAD SCHEDULE, SHEET E2.



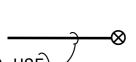
PROPOSED ELECTRICAL JUNCTION BOX SEE DETAILS PROPOSED ELECTRICAL JU & TABLE B, THIS SHEET



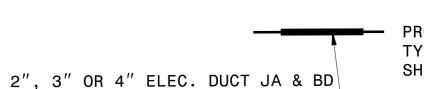
REFERENCE TO CORRESPONDING NOTE AS NUMBERED



PROPOSED FEEDER CIRCUIT CONTROL SYSTEM(A), √A1 CIRCUIT(1) PLAN SYMBOL (6) SEE TABLE A, √6 THIS SHÈET



→ PROPOSED SERVICE POLE AND LATERAL 30' CLASS 4 3#1/0 USE CONDUCTORS 2" CONDUIT



PROPOSED ELECTRICAL DUCT SIZE 2", 3" OR 4" TYPE (JA) OR (BD) LOCATION: SEE TABLE C, THIS



O PROPOSED UNDERPASS BREAKER PANEL

TABLE "A" CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE CONTRACT ITEM DESCRIPTION SYMBOL 2 #8 \emptyset | 2 AWG SIZE 8 CONDUCTOR (BK & RD) 2 - 8 W/G FEEDER CIRCUIT IN 1.5" CONDUIT 1 #10G | 1 AWG SIZE 10 GROUNDING CONDUCTOR 1.5" P | 1.5" PVC CONDUIT 2 #8Ø | 2 AWG SIZE 8 CONDUCTOR (BK & RD) 2 - 8 W/G FEEDER CIRCUIT 1 #10G | 1 AWG SIZE 10 GROUNDING CONDUCTOR

TABLE "B" JUNCTION BOX SUMMARY					
NUMBER	LOCATION	TYPE		SHEET	
JB1	OLD CONCORD ROAD, LT	PC18		E2	
JB2	OLD CONCORD ROAD, RT	PC18		E2	
TOTALS		2			

ABBREVIATIONS

BD LT JA	BURIED LIGHT	PVC RGC C	PVC SCHEDULE 40 CONDUIT RIGID GALVANIZED STEEL CONDUI CONDUIT
		RGC	RIGID GALVANIZED STEEL CONDUI

COMF	PUTED BY: _	AB	DATE:
CHEC	KED BY:	PKC	DATE: